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An

Inaugural Essay.

on

Dropsy.

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admitted March 15. 1821

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A preternatural collection of serous or watery fluid in any part or cavity of the body is called a dropsy. Although the disease may have particular names to distinguish it according as it is situated: viz Anasarca when in the cellular membrane, Ascites when in the Abdomen, Hydrotharax when in the chest, &c yet the disease is actually the same, depending upon the same general causes & cured by the same remedies with but little or no variation.

In correct language dropsy, or the mere deposition of water can hardly be called a disease; it is more properly the effect of some wrong, or morbid action, already in the system.

Causes of Dropsy. To every one who is in the smallest degree acquainted with Physiology it is perfectly well known that in the healthy state of the system a serous exudation or secretion is constantly taking place from the exhalents, into every cavity or interstice of the body,

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capable of receiving it; and that it is soon taken up by the absorbents vessels, and again conveyed into the circulation, in a manner which it is not necessary to explain at present. From a knowledge of this fact in the animal oeconomy it will be evident, that a dropsy must be the consequence if such an effusion, be suffered to accumulate, either from an unusual quantity being thrown out by the exhalents, or from a dimenution or interruption of power in the absorbents. From this it appears, that dropsy is nothing more than the effect, of a destruction of the natural ballance, existing between the exhalents & absorbents vessels. That dropsy is the effect of this destruction, will not be denied: but a question may arise, whether the exhalents or the absorbents are most frequently in fault. Here I believe, the generality of practioners concur in the opinion, that the increase effusion or secretion, is by far the most frequent cause:

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but that it may occasionally arise also from a want of power or interruption in the action of the absorbents is equally true, though this is not a frequent cause of this disease. The increase of effusion may arise from whatever affords an obstruction to the free return of blood to the heart, either from disease of the blood vessels themselves or of the heart, as ossification, aneurism, polypus &c or from pressure on the blood vessels from other causes, as pregnancy, tumours, abscess, schirrosities of the abdominal viscera & more particularly of the liver. It might not be improper here to remark that Dr Cullen does not consider obstruction in any of the abdominal viscera except the liver, as causes of dropsy. That the above causes may impede the circulation & by that means increase the action of the exhalents is very evident; but on the other hand when dropsy depends upon a want of absorbtion, the cause of this deficiency is not manifest,

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but from the same remedies being beneficial which act on the principle of stimulating the part as for example friction; may we not infer it to be owing to a debility of the vessels of that part. Dropsy may also arise from mere debility, or what has been called a Hydropic Diathesis, & in this case the absorbents certainly are in fault. Intemperance, Indolence, large evacuation of blood, sudden suppression of accustomed evacuation &c are mentioned also as causes of dropsy. Although it may & does frequently arise from the preceding causes, yet it is more frequently the effect of other diseases, as Gout, Asthma, Angina Pectoris, Scarlet Fever Erysipelas, Diarrhoea Dysentery, Jaundice, &c and more especially from protracted Intermittent Fever. Having thus enumerated the seats & causes of dropsy.
I shall proceed in relating the symtoms, not thinking it necessary to mention all the symtoms attendant on the various forms of dropsy
I shall confine myself in the following observation

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Anasarca commences with a swelling of the lower extremeties, which at first appears only in the evening, in the morning disappearing, the swelling is inelastic, pitting under the finger which slowly fills up again, the swelling which was at first confined to the ankles, gradually extends upwards to the thighs, trunk of the body, & even to the head & face, which appears puffed up, the skin is sometimes greatly distended, fluid oozes out or being too viscid or gross to pass through the pores of the cuticle, raises it up in the form of little blisters, the skin is also dry & glossy, pale & smooth. The urine is diminished in quantity, there is great thirst, generally costiveness, sallowness of countenance and emaciation, to these succeed stupor, heaviness and a slow fever. This form of dropsy very frequently precede some of the other forms, & not unfrequently in the advanced stage several of them are present at

the same time our prognoses in this disease are generally favourable, when the urine is increased in quantity, when there is much moisture on the surface of the body, when there is not much debility or emaciation, when there is a diminution of thirst, & especially when there is no visceral obstruction but great emaciation drowsiness, organic affection, dry skin, great thirst febrile heat, "quick & bounding pulse", with Hæmorrhages. Petechia &c are to be regarded as very unfavourable symptoms. Having thus considered the causes, seats, & symptoms of dropsy. I next proceed to the consideration of the cure. To this end all our views & opinions tend; but were I convinced in the accuracy of the statement, generally given by european practitioners respecting the cure of this disease, I should entertain it with no flattering hopes of success: there is however, perhaps no disease to which the maxim of the immortal Rush is

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more applicable than they present which is "to attack diseases in their earliest state and eradicate them before they are deeply rooted in the system" and to the method of this practice I principally impute their want of success; a small evacuation of blood, or a slight purge will do more towards curing dropsy in the early stage, than the most favourite medicines we can employ at a more advanced period; thousands recover when thus treated, but very few when the disease is suffered to fasten itself upon the system.

In the commencement of the cure of dropsy, we must in the first place remove if possible the cause of the disease; if it is obstruction to the circulation from tumours, we must call in the aid of the surgeon; if it be general debility we must restore tone to the system; if the patient is addicted to intemperance, he must forsake the intoxicating draughts; if he is indolent or inactive, we must arouse him to enterprise &

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exertions; if it is caused by large evacuation of blood, these must be suppressed, or if from the suppression of accustomed discharges we must restore these again to the system. But unfortunately, the causes may either be hid from us entirely, or be of such a nature as to prevent our attacking it directly with remedies, hence the cure is difficult & dubious, nevertheless we must not abandon our patient & remain inactive, but resort to the means we possess of evacuating the diseased fluid, being guided in some measures by that oracular star of the system The quest. The remedies we are in possession of for the accomplishment of the purposes first mentioned are 1st Bleeding. 2nd Emetics 3rd Purging 4th Diuretics 5th Diaphoretics 6th Derivation 7th Friction 8th Punctures That a free bleeding is highly useful & essential in most cases of dropsy is confirmed by the experience of all Physicians of the present age (& especially those of America.)

in the pericardium the pulse is least accelerated, or in a cool state, the surface is dry, the tongue parched, and the blood when drawn exhibits the buffy coats, an more denoting arterial action, which in this as in most other cases must be reduced before any other remedy can be prescribed with utility, & sometimes even before they will bear a vent, although venesection is not so frequently called for in anasarca as in some other form, yet generally the affection is of an inflammatory nature, & calls loudly for the lancet. Indeed in some forms of dropsy, & especially in that called hydrothorax, from the authority of Corvisart I am led to conclude, that venesection is as necessary to the previous use of other medicine, as emetics & purges to the administration of bark in intermittent fevers. Emetics & cathartics notwithstanding being occasionally effectual in curing dropsy, practitioners were naturally led to infer their utility when artificially

excited. The Digitalis has been recommended when it was found might be easily proved, but these effects appears to be generally confined to cases where the stomach is loaded with offensive matter. At the present time Digitalis is in no great reputation but has given way to other more certain means especially to Purging. The use of Digitalis in dropsy is no modern discovery as it was employed by Sydenham & Heberden & recommended. Of diuretics & cathartics, the drastic ones such as Gamboge, Scammony, Colocynth & Croton were selected as being most efficacious, this however is not true in all cases. They appear to be more especially applicable to old dropsies attended with a torpid condition of the alimentary canal, but in recent cases and where there is much febrile heat present, we find the saline cathartics much more preferable, as Epsom Salts & Potassa Salts are eminent in point of utility, to be beneficial however as a cathartic it must be given so as to prevent its diuretic effects, & for this purpose

It is recommended in the warm electuary. But uniting with the cream of Tartar, Jalap, we are led to believe from the authority of Dr Chapman that its virtues are greatly increased. In this way, he has found it one of the most beneficial remedies he ever used, being (to use his own words) "both from its operation on its effects." The manner of giving it is in the quantity of ʒii or ʒiii of the former and X or XV grs of the latter frequently repeated so as to keep up a continual discharge. The water still remaining we must in the next place resort to those remedies which act more particularly on the lymphatic system: Pulsate to Diuretics. As a diuretic in dropsy, the cream of tartar is eminently deserving of notice. It is even thought superior to Digitalis, when prescribed, under speedy, urgent dropsies. It may be given in the quantity of ʒi in a quart of water through the course of the day, & in this way it operates as a diuretic. Now,

but Dr Chapman recommends it in the form of an enema, when it causes profuse bilious discharges of urine & alvine evacuation.

The latter act is as efficacious a remedy, if not small regulated, but is more in great measure superseded by more powerful means, a frequent cause, however of its failure, arises from its being given in too minute doses, but an objection to large doses is that it is extremely apt to nauseate & irritate.

The common Cowslip of Dr Chapman speaks highly of as very useful in dropsy.

It may be given in infusion, the parts of it usually the roots. Among all our remedies for the evacuation of water in dropsy, none is perhaps entitled to more respect than Digitalis. The credit is due to Dr Withering of first having introduced it in this disease, when sentiments respecting it are decided, in consequence of its supposed powers, the urine, indeed in dropsy so far as the accumulation depends upon the secretion of water, so far it

may be taken upon. Notwithstanding the high regard in which I entertain this as a diuretic in dropsy among my professional practitioners, yet I am not prepared to say it is so very efficacious in a great measure to injurious consequences of the disease to which it is applicable, or as long as the urinous be kept coagulated in the pelvis, the remedy will not only be ineffectuous, but injurious for reduce arterial action & then it will be productive of the happiest effects, proving almost as certainly diuretic as potassed citrate or acetate of potass. Emetic it may be given in powder or tincture, and a writer Dr Chapman recommends it in the form of wine as less dangerous. Although the above opinion which I have advanced as to the disease to which the depletion is applicable is the one contended for this period, yet it is considered by a celebrated Professor of a neighbouring university that it is only applicable when the lancet is indicated

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for which it answers as a substitute, but at the same time
is adverse to its use, saying its name "digitalis,
indicates its effects, it points to the grave."
Similar to the preceding in some respects is the
Tobacco; but it is at once both a disagreeable and
dangerous medicine & is not generally employed.
Th. Turpentine is a remedy of same utility as a diuretic
when given in the dose of X to XV gtts twice or thrice
a day, in a larger dose it operates as a purge. The
Sandrac or Rutherman root is a remedy that once
enjoyed considerable reputation but is now little
used as much of its efficacy and in most practitioners
is not employed. Dr Ingham however commends it
particularly in cases where an much
increased irritation or a small portion of
opium as extract aqua X or XV gr. combined with
tincture of cantharides. Turpentine is little administered,
and more for its special association in
the various forms of dropsy; when given in small
doses it induces irritation of the bladder Strangury &c

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but when given in the quantity of ʒii or ʒiij through the day, it will prove powerfully diuretic evacuating large quantities of water. The last article I shall mention as a diuretic is the Squill.

This is decidedly the most certain & efficacious article we possess of a diuretic. In general I believe it is given in too small doses, I have known the water of universal dropsy completely evacuated in the course of a few days, by the patient taking large quantities of the infusion, when given alone, this I consider the best way of using it, but its virtues may be greatly increased when given in powder by adding calomel to it & sometimes a little nitrate of Potash.

Diaphoretics are medicines which once were of great repute in the cure of dropsy, much of which however is now lost; nevertheless they are usefull especially in dropsies brought on by Intermittant Fevers, and where the skin is parched & dry.

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the most preferable. Of the internal remedies, opium especially in the form of dovers powder is highly usefull. The swelling still continuing and the strength of the patient not forbidding; especially in dropsy from visceral obstruction we may sometimes experience much benefit from the use of mercury, urged to a salivation; and indeed we would naturally be led to expect such effects from the great power of this article over the absorbent system. Local Means. Friction with the hand, flesh brush, or with flannel are sometimes usefull, but should not be trusted in to the exclusion of other more certain means. The skin still remaining distended by the pressure of water, we may puncture it with a lancet, guarding however that they be small, distance from each other, and not in the most depending part of the limb, as gangrene may sometimes arise from them. If this however should unfortunately occur either from the cause above, distention or from the injudicious application of blisters, the best remedy is the application of a flannel roller to the limb. This remedy on the authority of Dr. Chapman is of great utility.